

The Future of Networked Research and Education

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- Much technical research is already conducted in a team environment
 - Lead PI
 - Multiple researchers
 - Usually in one institution (financial, collegial, proximity issues)
- SERC expands the envelope by facilitating collaboration across institutions
 - Still with the lead PI concept
 - Infrastructure to deal with the financial issues
 - Teambuilding to deal with the collegial issues
 - Technology and F2F meetings to deal with proximity
- Good examples of both low capital and high capital projects
 - BKCAS and HADRON, e.g.

Collaborative Doctoral Education

- Degrees still awarded by one school
 - Awarding campus policies govern
 - Seeing more evidence of cross-university doctoral committees
 - Even local committees can have dysfunctional behavior; jury is out on the efficacy of cross-university committees.
 - Much external collaboration occurs in campuses with small tenured faculty
- While many campuses have large research lines that support multiple doctoral students, we have not seen that so much across institutions.
- Relationship between doctoral advisor and candidate is essentially one-to-one.
 - Dissertation is an individual product
 - Advisor plays key role
 - Still highly unusual for advisor to be from another institution

- Collaborative research is farther advanced than collaborative doctoral education.
- Technology is not the barrier; the nature of the advisor-candidate relationship is.
- Tipping point depends on new understanding of that relationship.



Networked Research and Education

Bill Scherlis

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- Background – Ed tech
 - MOOC
 - Flip
 - Learning R&D
 - Curriculum
- Background – People, roles
 - Bathtub
 - Depots
 - STEs
 - Falling behind
- Opportunity – Delivery
 - Hybrid curricular
 - Intensive executive
- Opportunity – SE Content
 - Well lopsided
 - Software domain
- Opportunity – Modalities
 - Bring to users
 - Networked